بسم الله الرحمن الرحيم

(وَيُنَجِّي اللَّهُ الَّذِينَ اتَّقَوا بِمَفَازَتِهِمْ لَا يَمَسُّهُمُ السُّوءُ وَلَا هُمْ يَحْزَنُونَ)
الزمر61

صدق الله العظيم

PSYCHOLOGY

THE FINAL LECTURE

By

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Perception

Definition:

-It is the process of giving meaning to a sensation. We receive signs and perceive meanings.

Signs of perception:

1) **Symbols:**

-They are stimuli which *stand for* an object.

E.g.: a name of any one stands for the person named.

2) **Signals:**

-They are stimuli received from the object e.g. smoke is a signal for fire.

Factors affecting perception

• Figural factors:

1- Similarity:

- Similar objects tend to be grouped together.

2- Proximity:

- Proximate objects tend to be grouped together.

3- Closure:

- Stimuli tend to be grouped together to perceive a defective whole as a closed .

4- Symmetry:

- E.g. asymmetric triangles are liable to be perceived as symmetrical ones.

5- Approximation:

- E.g.to perceive the poor figure as if they were exact and good.

6- Good continuation:

- figures tend to be continued.

7- Grouping and patterning:

- There is a tendency for grouping of similar stimuli.

• Personal factors:

1- Mood:

- **E.g.** sad person perceive everything as bad.

2- Need:

- **E.g.** hungry person selectively perceive (smell) odors of food.

3- Interests:

- **E.g.** every one perceives what he is interested in more than any other thing.

4- Mental set:

- If you are prepared to find something you will overlook other things.

5- Habit & Familiarity

- **E.g.** we read AMATONY as ANATOMY .

6- Aesthetic factors:

- The pleasant figure will be perceived where an irregular figure will be overlooked.

Abnormal (faulty) perception

• A) Illusion:

Definition:

-It is false perception of an external stimulus..

Causes:

1. Illusion due to physical causes :

E.g. mirror illusion: a person looking in the mirror perceives his figure as if it exis behind the mirror on the other side.

2. Illusion due to habit and familiarity.

E.g. AMATOMY is read as ANATOMY

3. Illusion due to set and expectation:

(e.g. waiting and important telephone call may make us perceive the bell door as a telephone call.

• B) Deja vu phenomenon:

-New situation is regarded as repetition of previous memory.

• C) Hallucinations:

Defention:

-perception without the presence of external stimuli.

Causes:

- Normal :
  1. Dreaming and hypnagogic states (states just before sleep).
  2. With severe emotions.
  3. With stimulation of the sense organs (pressure on the eve globe).
  4. During sensory deprivation experiments.

- pathological
  1-Most psychotic disorders.
  2-Organic brain diseases.
  3- Temporal lobe epilepsy.
  4-Intoxication.

Learning

Definition:

- It is is the process of acquiring new knowledge and responses.

Methods of learning

I. Learning by trial and error.

- It is a primitive way of learning used by young children and animals..
- E.g the rat in the maze consisting of narrow passages between walls with some blind paths and one particular route leading to a food box.
- The rat after several wrong trials will succeeds in reaching the food.

II. Learning by imitation

- It depends on the capacity for observation and doing exactly what others do.
- Used mainly by higher animals, and by growing up children.

III. Learning by insight

- It depends on planning the solution on a mental level before hand.
- Past experiences and full information about the problem are important tools in insight learning.
- E.g.The chimpanzee's experiment of Kohler (1925)
- The chimpanzee after jumping many times to reach the banana that it hung higher than his reach brought abox and climbed on it to get the bananas.

IV. Learning by conditioning

- Establishment of new stimulus response relationship

classical Ivan Pavlov

- Devised an experiment on the dog by opening its salivary gland duct on the surface of the cheek and making the salivary flow.

Stages of development of classical conditioning

- **Preconditioning**

Unconditioned stimulus(US) (food) >>> lead to Unconditioned response (UR) (salivation)

- **Conditioning**
  - Combination of unconditioned with conditioned stimulus
  - Bell sound + food >>>> salivation repeated several times
- **Post — conditioning**
  - CS (bell sound) >>>>> CR (salivation)
  - Conditioned stimulus>>>>> >conditioned response.

Laws of learning by conditioning

1- Conditioning

- It means the establishment of new stimulus response relationship.

e.g. association between the new stimulus (musical tone) and the unconditioned response (salivation).

2- Deconditioning

- It means the loss of acquired stimulus-response relationship,

e.g. repeated presentation of musical tone (CS) without following it by food in Pavlov's experiment will make the conditioning response by salivation diminishes until it stops.

3- Generalization

-It means the transference of the acquired stimulus response relationship to other stimuli similar to the original one .

e.g the dog responds by conditioning to different musical tones in Pavlov's experiment.

4- Reinforcement

- It means intensification of the conditioned response by' rewarding.

e.g The dog salivate repeatedly when rewarded by giving food in Pavlov experiment.

5- Instrumental (Operant) conditioning

- The animal should do some active behaviour to get the reward.

e.g. the cat must lift a latch in order to escape from the box.

6- Experimental Neurosis

- The animal becomes neurotic and angry in conflict situation

e.g. discriminate between two nearly equal holes that lead to the food box.

Factors affecting learning

A- Personal factors:

1- **Intelligence**
2- **Previous learning:** especially when it is in the same topic or domain.
3- **Acquired habits:** e.g The habit of observation and attention.
4- **Physical state:** e.g physical handicap makes the process of learning difficult.
5- **Mental state:** e.g psychotic illnesses will affect learning.
6- **Emotional state:** e.g depressed mood make the process of learning very difficult.
7- **Motivation:** The more the motivating force, the better learning and the nearer the goal, the better the performance .

B- Objective factors:

1- **The learned object:** Learned material should be easy, interesting, perfectly organized.
2- **The method of learning:** Should be easy, and applied according to the capacity of each individual.

Memory

Definition:

-It is the ability to encode information, retain them for a time and bring them back to conscious awareness when needed.

Stages of memory:

1-Impression or encoding

Impression is a sort of intention of retaining topics.

Encoding is the transformation of information into the kind of code that memory can accept.

2-Retention (storage)

Retention is the storage of the encoded information.

3-Retrieval or reproduction

-Is the process by which the information is recovered from memory when it is needed either by:

Recall remembering objects that not present to the senses as when mentioning the person's name.

Recognition: identification of object presented to the senses as when identifying the person's face. .

Factors affecting impression

1- Identification of the material to be learnt.

2- Making voluntary effort with strong concentration.

3- Global learning is better than part learning.

4- Over-learning with searching for the relationship between the learnt material

5- whole understanding and getting idea about the learned subject.

6- Recitation and spaced repetition.

7- Physiological and psychological state of the learner.

8- Interest and motivation.

9- Learning by using more than one sensory organ i.e reading with loud voice.

10-preparing proper calm and healthy external atmosphere.

Factors affecting retention

- *All factors affecting impression.*
- Consolidation to become part of the molecular structure of the brain tissue.
- Recitation, sleeping after learning and revision in the morning .

Factors affecting retrieval

-It depend on the perfect two previous stages (impression and retention)

Forgetting

- **Defention:**

It is the negative aspect of retention.
It is caused by defect on the process of impression, retention.

- **Theories of forgetting:**

1- **Interference:**

Retro-active interference

Disruption of memory traces of the old learnt material by the recently learnt one.

Proactive interference

Disruption of memory traces of the newly learnt material by the old one.

2- **Disuse atrophy:**

Due to lack of continuous memory practice.

3- **Repression:**

-It is unconscious mental mechanism by which painful. psychological trauma is actively forgotten.

Types of memory

- **Short term memory:**

.This is measured by processing tasks for minutes after the stimulus is presented.

- **Long term memory:**

.This is measured by requiring responses hours or days after stimulus presentation.

Physiology of memory:

- Brain areas that mainly concerned with memory are mainly located in temporal lobe and limbic system
- In uncinate epileptic fits, there is recall of certain memories as an aura before fit occurs.
- (RNA), and (DNA) are responsible for the changes that form memory.
- Increase in these protein syntheses in the brain may facilitate the learning processes.

Disorders of memory:

A: Amnesia

It is partial or complete inability to recall past experiences.

1- Anterograde amnesia :
Amnesia for recent events.

2- Retrograde amnesia :
Amnesia for remote events.

3- Circumscribed amnesia (amnestic gap):
Amnesia limited to particular period of time and events.

B: Hypermnesia

Exaggerated degree of retentions and recall. e.g. mania

C: Paramnesia

1- Confabulation :
-Filling of gaps in memory by untrue events e.g. dementia

2- Retrospective falsification:
-Distortion of true memory by adding false details.

3- Deja vu :
-New situation is regarded as repetition of previous memory.

4- Jamis vu:
-False feeling of unfamiliarity.

5- Deja intendu:
-Illusion of auditory recognition Deja phenomena may occur in fatigue, intoxication and epilepsy.

Intelligence

Definition:

-It is the power to learn and the capacity to act with foresight and the ability to gasp essential relations.

Development and growth of intelligence:

- Intelligence is the outcome of interaction between heredity and environment.
- Mental growth like physical growth tapers off in adolescence and reaches its adult level at the age of 15-18 years.

Measurement of intelligence:

-**Alfred Binet** arranged problems which increases in difficulty and grouped them in age levels and termed them mental age levels.

-Terman then introduced the term intelligent quotient (1.Q.). as an index of mental development.

Intelligent Quotient I.Q. :

-I.Q. denotes an index of achievement relative to others of the same age.

$$I.Q = \frac{\text{Mental age}}{\text{Chronological age}} \times 100$$

Mental age: is a measure of the individual's level of intelligence at a given time.

Chronological age: this is the actual ag

Distribution of Intelligence (in I.Q. units):

Over 140 = Genius
120-139 = Very Superior
110-119 = Superior
90-100 = Average
80-89 = Dull Average
70-79 = Borderline
Below 70 = Mentally Retarded

Types of mental retardation

Idiot:

- I.Q. below 25.
- cannot avoid common dangers
- cannot take care of himself
- associated with under or maldevelopmental manifestations.
- mental age does not exceed 2 years.

Imbecile:

- I.Q. 25 — 50
- The patient can protect himself and avoid common dangers.
- can take care of himself
- mental age rages between 3 - 7 years

Feeble—mindedness:

- I.Q. 50 — 70.
- can do simple work.
- They can be educated in primary schools with some difficulty.
- They are easily suggestible to perform sexual acts. or crimes.
- Their mental age ranges between 7—10 y.

"Educable" group of mental retardation.

1- **Idiot Savant:** rare mentally retarded persons, who show remarkably high ability in one special line e.g. music.

2- **Arithmetic prodigies:** are normal in intelligence, but outstanding in rapid mental calculations.

Group differences in intelligence:

1- **Rural Urban differences:**

- Urban people have better educational opportunities, socio-economic status, so they are more intelligent than rural peoples.

2- **Occupational differences:**

-Certain occupation (as doctors or engineers) are occupied by intelligent people.

- This is due to the selection before entering university

3-Racial differences:

-The difference between races may be due to differences in available opportunities.

4-Sex differences:

-No differences in basic intelligence between males and females.

But **males** show better arithmetic and reasoning abilities while **females** show better vocabulary abilities.

Assessment of Intelligence useful in

1. Educational and vocational guidance.
2. Appropriate choice to different positions.
3. Diagnosis of certain mental retardation.

Emotions

Definition:

-It is the basic moving power of human behaviour .

Emotions usually refer to :

1. **Subjective feelings** i.e. what the individual feels.
2. **Cognitive components** i.e. thoughts associated with particular feeling.
3. **Motivational component**.
4. **Bodily changes** in sympathetic and parasympathetic responses.

Phases (and aspects) of Emotions:

1- **Experience:** this is the inner feeling (i love, I hate. I am afraid etc..). However, sometimes our emotions may be unconscious .

2- **Expression:** include verbal expression and bodily expression .

Characters of normal emotions

1- Do not endanger the biology of the individual

e.g. sympathetic hyperactivity do not cause persistent hypertension .

2- Do not interfere with his social adaptability

e.g. hate does not lead to withdrawal from all human relation .

3- Do not arouse contradictory motives,

e.g. love and hate occurring together at the same time.

4- Do not interfere with the individual productivity.

e.g. normal sadness should not prevent one from going normally to his usual work.

Types of emotion:

A- Classification according to the type of the stimulus:

1. **Emotion of fear**, in response to a threatening stimulus.
2. **Emotion of anger**, in response to interference.
3. **Emotion of determination,** in response to mastering a situation.
4. **Emotion of submission** in response to overwhelming pressure or authority.
5. **Emotion of eagerness** in response to unknown situation.

B-Classification according to maturity:

1) **Primitive emotions** (like fear and anger) lie at the bottom of the scale.
2) **Mature emotions** (like depression and sympathy) lie high up.

Neurophysiology of emotions:

-**Limbic system** is the responsible for mediation of emotional experience and expression.

-**The hypo thalamus** when stimulated. autonomic state hyperactivity arises.

-**Frontal lobe** has a controlling role over limbic system. it controls and modifies the quality of emotions.

Disorders of emotions:

-**Emotions are said to be disturbed or abnormal if they**:
endanger the biology, interfere with social adaptability, arouse contradictory motives or interfere with the individual productivity.

A) Qualitative disorders:

1- Incongruity:
Emotional expression is not related to the situation.

2- Lability:
Emotions change from one extreme to the other with no obvious reason.

3- Ambivalence:
Contradictory feelings towards the same object or person at the same time.

B) Quantitative changes:

1- **Apathy:**
Both emotional expression and experience are abolished.

2- **Indifference:**
Emotional expression is abolished while emotional experience is preserved.

3- **Elation:**
The individual is unduly happy.

4- **Depression:**
The individual is unduly sad.

5- **Anxiety:**
heightened inner tension accompanied by a vague feeling of uneasiness.

Human Aggression

Definition:

-It is a behaviour intended to injure another person either physically or verbally.

Factors affecting and causing aggression:

1- External stress & social factors:

1- **Intense frustration,**: especially when it is massive and unexpected.
2- **Insults**: such as calling one bad names in front of his fiancee.
3- **Unpleasant environmental conditions** such as high temperature.
4- **Oppression from unjust authority** such as events in political conflict.
5- **Exposure to aggressive models** can make other persons behave in violent manner.
6- **Crowding increase potential violence**.
7- **Socioeconomic factors** like poverty.
8- **Availability of weapons** as in Upper Egypt

2- Personal factors:

1- **Heightened physiological arousal**: some persons has low tolerance threshold.
2- **Degree of sexual arousal** either low or high .
3- **Exposure to pain** whether physical or psychological pain.

Types of aggression

1- **verbal or physical** i.e. either inducing bodily harm or attacking with words.

2-**Active or passive**: like homocidal or neglect.

3- **Direct or indirect** face to face or through hindering one to get his right.

4-**Hostile aggression or Instrumental aggression**
Intention to harme another person or way of satisfying

Theories Of Aggression:

1- Instinctually based theories:

a)Freud

-sex and aggression are the two basic instincts. Hence aggression could never be eliminated. It could be modified by promoting positive emotional attachment between people and by providing substitutes like sports.

b) Frustration-aggression

-when a person's effort is obstructed, aggressive drive arises.

2- Learnt response theory:

- It is a learnt behavior.
-Acquired through observation and imitation

Biological Basis of aggression:

1- **Endocrinal:** is usually related to the level of testosterone.
2- Chromosomal: no evidence between any chromosomal abnormalities and aggression.
3- **Limbic system:** aggression in animals is under some control of limbic structure.
4- **Neurotransmitters:** the role of neurotransmitters is still controversial in human.
5- **Alcohol and drugs:** alcohol, sedatives and hypnotics, could lead to aggression.

Prevention and control of aggression

1- Prophylactic: prevent, as much as possible external and social causes.

2- Catharsis: like sport.

3- Training social skills can reduce of human violence.

4- Biological factors are dealt with according to their nature.

5- Punishment: must be clear, strong and immediate.

Dynamic psychology

Conflict

Definition:

-It is an opposing or competing activity of psychic forces.
-could be conscious or unconscious.

Types of conflict

I) approach-approach conflict

- The two objects are <u>equally</u> desirable and a choice must be made
e.g. falling in love with two girls.

II) Avoidance-avoidance conflict

-The two object are undesirable and choice must be made .
e.g. a soldier choose between exhibiting cowardly behaviour or being injured or killed.

III) approach avoidance conflict:

-To reach desired goal u should accept undesired one .

e.g to marry the girl you loves, and accept her intolerable mother!!!.

A defensive mechanism

Definition

- *It is* an unconscious process occurs automatically to help the individual to deal with the environment and himself.

1- Repression:

- Repression is the most commonly used mental mechanism.
- It is sometimes called the mother mechanism.
(other mechanism don't occurs without repression)
- It occurs beyond conscious awareness.

E.***g.***
-A student does not see his name in the list of failures
(although it is written clearly in large letters).

N.B

<u>In clinical practice,</u>

- A mother misses to tell the pediatrician about the uncovered ice **cream her child** ate.

2- Projection:

- The individual sees in other people his undesired characters .

e.g. selfish person accuses other person by being selfish.

-In clinical practice

Mother's projects her sufferings onto her child and goes to consult the doctor for some pains of her son while he is free.

3- Reaction formation:

- It is doing the opposite of what is really felt without knowing.

E.g. A mother may show extreme love to her unwanted child.

4- Rationalization:

-Giving untrue explanations to some events or information in order to cover the real.

In clinical practice: A man suffering from impotence explain this by back pain or knee arthritis.

Consciousness

Definition:

-It is the state of awareness which mean that the person *not asleep, not unconscious and not in coma.*

Biological Rhythm and Life Cycles

- **Periodicity**

-Life, in all aspects, manifest periodicity every thing occurs in cycles.

- **Physiological cycles**

-Such as *cardiac cycle, menstrual cycle, sleep-vigilance cycle and sleep-dream cycle.*

- **Psychological cycles:**

-Emotional behavior is more related to lunar rhythm (27.5)

Clinical application

- **periodical disorders may be physical and psychiatric disorders**
  e.g. peptic ulcer, and seasonal affective disorder .
- **Each cycle is a new chance for healing**
- **Trust the cycle of nature** and treat his patient with the wisdom that what comes goes.
- **Expect relapse of any illness.**
- **Remember the circadian rhythmin certain investigation**
  (e.g. blood cortisol level)
- **Special support** to Occupations that make workers change their natural cycles.

Vigilance Sleep Cycle

- Sleep is a temporary state of relative cessation of the conscious level of brain activity.
- Sleep is not an inactive state of human life.
-Sleep-wakefulness cycle represents the basic biorhythm of human brain
-Sleep is the physiological background where dreams occur.
-Sleep is a sensitive indicator for psychological and physical health.

Psychophysiology of arousal:

-The arousal state is regulated by the ascending reticular activating system (ARAS).
-Stimulation of the ARAS will lead to the state of arousal.
-High frequency, low voltage activity of the cerebral cortex indicates arousal .
-low frequency high voltage activity mainly indicates sleep.

Types of sleep

Sleep is mainly divided into two alternating types:

1- **(Quiet) (dreamless) NREM sleep (Non Rapid Eye Movement sleep)**

- It includes four stages, from the light to the deeper- deepest.

- It is relatively calm, and is interrupted by occasional muscular jerks.

- The EEG record show mainly large slow waves.

2- **(Paradoxical sleep)REM (Rapid Eye Movement)**

- Occurs regularly for 20 minutes every ninety minutes during sleep.

-Active phase of the sleep.

- The respiration is shallow and irregular, the pulse is rapid .

- There are some movements in the hands and feet and eyes .

- Generalized muscular relaxation.

- If we awake someone during this phase usually can remember the dream.

Dreams

- Dreams occur mainly during the REM phase.
- One fifth of sleep activity is occupied by dream activity.
- Everyone dreams more or less the same amount.
- Not all dreams are symbolically significant and meaningful may be:
- **Chaotic dreams** (ill-defined and disconnected),
- **Day residue dreams**
  (as if one continues what he starts during the previous day)
- **Wish fulfillment dreams** (the hungry dreams with bread).

Functions of sleep and Dreams:

1. Sleep provides both physical and mental rest.
2. It is the medium where dreams occur.
3. Sleep gives a chance for integration in the whole activity.
4. Dreams act as a safety valve that permits liberation and expression of crowded information.
5. Dreams allow (re patterning) of information.

Clinical applications of sleep and dreams

1- Sleep is as essential for health as vigilance.
2- Sleep is a monitor for health.
3- Prolonged insomnia is liable to exhaust the patient.
4-Dreams are the other aspect of our lives the physician should shows some interest in this aspect .

Developmental psychology

Adulthood (20-65 years)

Criteria of Maturity:

1- Insight:

-IT is the ability to accept the self-potentialities without over- or underestimation.

2- Responsibility and self-reliance:

- Tries to depend on himself and is to make decisions.
- Gradually he W ill he able to be responsible for others.

3- Sense of purpose*:*

-Works toward certain goal and overcomes obstacles.

4- Emotional control:

- Overcome his emotions and does not allow it to overcome his logical thinking .

Problems of adulthood:

a- *Work:*

b- *Marriage:*

- Selection of the proper partner .
- Adaptation to the new life .
- Sexual adjustment problems .

c- *Parenthood:*

-Demands. Responsibilities and restrictions .

d- *Getting older:*

- Physiological changes which needs new psychological adjustment

Old Age (It start at 65 years).

Basic changes of old age:

1- ***Physical changes****:*

- Less resistant to diseases and environmental changes .
- Onset of a variety of chronic illnesses (degenerative diseases in joints. C.N.S. and cardiovascular system.)

2- ***Mental changes:***

-decline in mental capacity but useful experience.

3- ***Social changes:***

-denied as adequate and functioning member in the society.

Problems of old age:

1- work:

- slower in mental tasks, but more practiced and more careful.
- Retirement is associated with being cut from familiar surroundings and friends .

2- Interests

- diminishes as a result of physical and psychological changes .

3-Isolation and loneliness

- due to the limitations in physical and mental capacities and due to most off springs have their independent lives.

4-suspicious and hypochondriac

(e.g. multiple bodily complaints without organic evidences to explain them)

5- *Deterioration in personal habits*

- Childish and disinherited due to decline in mental capacity.

Management of problems of old age:

1- Prevention.

Expect changes and arrange for proper handling.

2- Religious value

Make children take their honest responsibility towards the aged people

3-Proper religious practice

will maintain integrity of the aged

4- Maintain sustain goal whatever simple.

5- continue work as much as his abilities permit.

Medical Ethics

Core Ethical Principles

1- Non maleficence (not to harm):

-This is the duty of the physician to avoid inflicting physical or emotional harm on the patient .

- can occur due to:

a-Negligence
b- Lack of medical competence.

2- Beneficence (to do good):

-This is the duty of the physician to be of benefit to the patient and to prevent harm from the patient.

- These goals apply both to:

a-Individual patients .
b-The society

3- Justice (to be fair)

-Fairness in the distribution of medical services
-**E.g.** when available beds are limited a physician has to decide which patients have priority for admission.

4- Respect for autonomy (free decision):

-This means respecting the patient's right to make his autonomous choice
-This principle is based on "informed consent" in the physician / patient transaction.

- <u>In informed consent the choice should be:</u>

1- Intentional.

2- Free of undue or *controlling* outside *influence.*

3- *Made* with rational understanding.

4- The patient is not highly confused or impaired.

Professional Ethical Principles (Medical Professionalism)

Definition

-It is a concept indicating the ethical codes ethics that should govern the behavior of a professional group.

The basic and universal principles:

1- Primacy of patient's interest and welfare:
Physicians should be dedicated to serving the interest of the patient.

2- Respect for patient's autonomy:
Physicians must be honest with their patients.

3- Social justice and equality:
Patients should be treated equally without discrimination whether based on race, gender, socioeconomic status, religion, or any other social category.

4- Commitment to professional competence:
Physicians must be up to date medical Knowledge and clinical skills.

5- Commitment to confidentiality:
A physician should preserve absolute confidentiality on all he knows about his patient.

6-A physician should respect patient's rights .

7-A physician should treat the patient as a person .

8-Physicians should always bear in mind the obligation of preserving human life.

9-A physician should maintain honesty and integrity with patients and patients' families.

10- A physician should maintain a dignified professional image .

11- Relationship with patients should be kept within appropriate professional limits.

12- **physicians should not seek private gain personal from interactions with for-profit** such as pharmaceutical firms and medical equipment.

13- **A physician should deal with unethical behaviour of professional peers .**

14- A physician should recognize the limits of his professional competence.

15- A physician should exercise great caution in using new diagnostic or treatment.

16- A physician should certify only that which he has verified.

17- **Physicians are required to provide health care based on wise and appropriate allocation of the limited medical resources**. e.g, avoid prescribing unnecessary medications and investigations.

18- **Physicians have an obligation of public reporting of significant medical hazards.**

19- Physicians should recognize an obligation to the health of society.

20- Physicians should actively participate in all efforts to provide a quality health care.

Framework for Ethical Reasoning And Decision Making

-Five different approaches to values that should govern our evaluation of medical ethics

1- The utilitarian approach:

a. The greatest benefit and the least harm.

b. The greatest good for the greatest number.

2- The common-good approach:

-Equally benefits to all individuals in the community.

3- The fairness or justice approach:

-Treats everyone the same and does not show discrimination.

4- The rights approach:

-Respects the moral rights of all individuals.

-The most basic of these rights is the right of free choice **(autonomy)**

Other different rights include:

A-The right to the truth.
B-The right of privacy.
C-The right not to be harmed or injured.
D-The right to what is agreed.

5- The virtue approach:

-Virtues are ideal moral attitudes or character traits such as honesty, fairness and self-control.

-Five questions to evaluate a certain action is ethical or not.

1- **What benefits and what harms will produce?**
An ethical action produces the greatest benefit and the least harm.

2- **How far does it advance the common good?**
An ethical action advances common good over individual interests.

3- **Does this action treat everyone the same?**
An ethical action treats everyone equally and does not show discrimination .

4- **Does these actions violate any of the moral rights of affected parties?**
An ethical action should respect the moral rights of all individuals.

5- **Is this action consistent with morel virtues?**
An ethical action should not contradict or violate moral virtues.

Ethical Dilemmas-in Medicine

-Ethical dilemmas in medicine arise from conflicts between two or more guiding ethical principles or between guiding ethical principles and other interests.

I- Conflict between guiding ethical principles:

Examples

1-Acutely infected appendix.

This may create a conflict between:

a. The obligation to provide the patient with immediate surgery

b- The obligation "not to harm" the patient since the operation carry some degree of *risk*.

c- Obligation to "respect the patient's autonomy" (refuse operation).

2-Terminal illnesses (e.g., cancer) .

-patient refuse life-sustaining procedures (e.g., respirator or dialysis)

-Such situations represent a major ethical dilemma discussed under the subject of "Euthanesia", which is concerned with whether or not to allow or help the death of patients suffering from terminal illness.

II)- Conflicts between guiding ethical principles and other interests:

1-Consultation between physicians through the internet and the obligation of confidentiality.

2-**The actual list of possible ethical dilemmas encountered in medicine is quite long**.

It includes:

-abortion
- New reproductive technologies.
- Maternal-fetal conflict of rights
- Euthanasia
-Organ transplantation.
-Geneting testing and genetic modification.

In order to deal with such dilemmas the physician should master the skills of ethical reasoning and decision making.

Informed Consent

Definition

- It is the cornerstone of the autonomy principle.

Valid informed consent requires satisfying three essential elements:

1- The patient should be fully informed about:

a. Diagnosis
b. Treatment or procedure.
c. Reasonable alternatives intervention.
d. The risks

2- **The patient should be competent to make a decision.**

This means that his ability for rational judgment should not be impaired (e.g., mental illness)

3- **The patient 's decision should be voluntary.**

- Not be under any kind of pressure .

Medical interventions requiring informed consent:

- **Some medical interventions require a signed informed consent such as** surgery and anesthesia .
- **Other decisions verbal approval after a reasonable informing discussion is sufficient.**

Exceptions to the requirement of informed consent:

1- Emergency situations

-when the patient is unable to give consent (e.g., unconscious) .

2- Incompetency to make decisions

-When the patient is a child or his cognitive capacities are impaired.
-The consent should be obtained from a substitute decision maker (e.g., closest relative).

3- Cases in which fully informing the patient would seriously worsen his condition.

Confidentiality

Definition

-It means keeping secret and not disclosing any information about the patient.

-Confidentiality is linked to core ethical principles.

-It respects the patient's autonomy .

-prevent possible harms that may result from the disclosure of information about his health or personal life.

Breaking confidentiality:

It can or should be broken under certain circumstances such as:

1- Serious harm to others, e.g., possible murder, serious contagious disease, patients lacking fitness of some jobs such as airline pilots or bus drivers.

2-Possible commitment of suicide.

3- Abuse to victims unable to protect themselves (e.g. children).

Violating ethical principles in medicine

1- Boundary violations:

-It is a boundary crossing in the doctor patient relationship

- The doctor exploits the patient for personal gains. E,g,(financial or emotional or sexual relation)

2- Mistreatment of the patient (incompetence):

- occur due to negligence or lack of knowledge.

3-Violations of confidentialities.

-Information about the patient without his consent.

4-Violations of the rules of ethical conduct

-with other members of the profession.

5**-Illegal activities:**

E.g., illegal abortion or illegal business or financial transactions related to the profession.

Doctor-patient relationship

(I) Models of Doctor-Patient Relationship

1-The teacher-student model.
2-The mutual participation model.
3-The friend ship model.
4-mutual participation model.
5-Rapport model.

(II)Transference and Counter-Transference

a) Transference:

- Unconscious attitude of a patient towards his doctor.

- Repetition of pattern of relatedness to significant people in his past (particularly parents).

-Itmay be negative if the doctor is identified with a bad figure, but it may be positive if the doctor is identified with a good figure.

b) Counter-Transference:

- Doctor's unconscious attitude towards the patient.

-It may be positive or negative.

(III) Doctor-Patient Communication

-The quality and efficiency of doctor-patient communication is of crucial importance in achieving two major goals:

1- Reaching an accurate diagnosis.

2-Enhancing patient cooperation and compliance to treatment plans.

Communication Skills

1- Doctor-Patient Interpersonal Skills:

a-Empathy: understand the feelings and reactions of other people
b-Showing respect and concern.
c-Showing support and warmth.
d-Developing a collaborative and cooperative relationship.

2- Information gathering skills:

– **Active listening** i.e. showing close attention to patient's complaints.
- Using an appropriate balance between open-ended and closed questions.
-Clarifying vague information.
-Directing the flow of information.
-Clear sequencing of events.
-Summarizing.

3- Information giving skills:

– Providing clear and simple information.
– Using specific advice and concrete examples.

– Categorizing information to reduce complexity .
.- Checking patient's understanding of what has been said.

4- Skills for motivating patient adherence to treatment plans

- Tailoring the treatment to suit the patient's circumstances and life style.
- Providing a clear rationale for required behaviour change.

- Providing examples of role models (e.g., showing films demonstrating patients undergoing similar medical procedures).

- Providing motivational feedback, *i.e.* positive reinforcement

(e.g., praise) of constructive behaviour and negative reinforcement (e.g., criticism) of uncommitted behaviour.

5- Communication skills for special situations:

a- **Special groups of disorders,** e.g. disabled (blind, deaf etc), terminally ill, chronic pain, and addictive patients.

b- **Special personality problems,** e.g., non-cooperative, hostile, or over dependent patients.
c- **Special clinical situations,** e.g., giving bad news.

Communication Problems

1-Lack of Information:

- patients usually complain that they do not receive enough information from their doctors.
- "**No news is not good news**". This may lead to anxiety and depression.
- Lack of information may affect the patient's sense of participation and reduce his responsiveness and cooperation in treatment plans.

2-Communication gap:

-Information which passes between doctor and patient are not understood .

- Doctors may use technical terms that is not understood by patients.

- Patients may use terms not familiar to some doctors.

- patients may falsely indicate that they understand the information in order not to look stupid .

3-Poor Recall:

- a problem in remembering the information or advice
- Recommendations such summarizing information and emphasizingis very important .

4-Lower Empathy:

- Patients complain that many doctors do not seem to be interested their problems.

5- Low Compliance:

- Compliance means the **extent to** which a patient follows the clinical instructions of the physician.

-Factors associated with low compliance include:

1-Perception of the physician as rejecting and unfriendly.

2-Failure of the physician to explain the diagnosis .

3-Increased complexity of the treatment .

4-Verbal rather than written instructions.

Coping With Physical Illness and Treatment

-The ability of patients to cope *with* such stresses is determined by three major factors:

1-The way the patient perceives his illness.
2-The kind of adaptations imposed by the illness.
3-The kind of coping strategies used by the patient.

1.Factors influencing the patient's perception of his illness:

a. Patient Variables:

Age, personality type, and psychological state .

b. Illness Variables:

The psychological responses to illness are determined by the way the patient perceives it.

- Disorders which limit mobility have stronger impact on active individuals such as sports people.- disabling disorders are perceived as more threatening by men .

- Disfiguring diseases are more problematic for women.

- Acute disorders have dramatic effects.

c- Social Variables:

-The reactions of people surrounding the patient play a major role in determining the psychological impact and outcome of illness.

- Good social support show higher tolerance and quicker recovery.

social isolation (e.g., I.C.U.) may have strong negative psychological impact on patients.

2. Demands imposed by illness:

- Dealing with pain, and other symptoms.
-Dealing with the hospital environment and treatment procedures.
-Developing adequate relationships with the health-care staff.
-Preserving a reasonable emotional balance.
-Preparing for an uncertain future.

3. Coping strategies:

a- Problem focused (or direct) coping:

- making direct efforts to eliminate the source of stress by:

1- Seeking information about the illness,and different treatment possibilities.

2-Seeking support from family and friends.

3-Learning of new skills releated to treatment .

(e.g., running a home dialysis machine).

The patient may take the form of one- or a mixture of the following disturbances:

a-Depression:

-It is related to the loss of physical or social functioning.

-It may be associated with guilt(illness is punishment)

b-Anxiety:

-It is related to the patient's worry about the cause and outcome of his illness.

- May be non-specific or may take the form of phobias towards specific procedures or treatments.

c-Paranoid behaviour:

-It is a less common reaction to physical illness .

-The patient becomes suspicious and tries to place the blame for his illness on someone else .

-This may reach a delusional level and aggressive behavior and refusal treatment.

Implications for helping:

a. Doctors should be aware of psychological effect of physical illness .

b. They should be create an atmosphere of understanding and acceptance.

c. They should give time and support when needed.

Coping with Terminal Illness

a. Communicating with a terminal patients:

- The important question is whether patients should be told that they have a terminal condition?
- There is no simple answer to this question because it depends on many variables.
- Many patients do want to know the truth about their condition and they cope better with communication but others not.
- Finally, the physician's real question should not be "shall I tell?" but rather "how do I tell?"
- The way of communicating should be guided the needs and circumstances of individual patients.

b. Psychological responses of dying patients:

1- **Denial** (there must be a mistake).
2- **Anger** (why me?).
3- **Bargaining** (e.g., please, keep me alive untill my daughter marries).
4-**Depression** (There is no use, it is the end).
5- **Acceptance** (This is my destiny; I had my share of life)

N.B -NOT ALL PATIENT go throught these stages but many variation depending on individual patient variables.

Psychological responses to specific treatments

-Some treatments impose highly stressful physical and social limitations that lead to lead to adverse emotional and behavioral changes.

-E.g. (ICU) or haemodialysis Patients undergoing such treatments are doubly stressed by:

1-**The severity of their illness.**
2- **The restriction imposed by the treatment.**

N.b some psychiatric trouble can occurs e.g(ICU psychosis)

Psychological Aspects of Hospitalization

A- Changes in social environment:

-Admission to hospital removes the patient from his familiar world.

-He will be restricted to one place .

- His routine life and daily habits become disrupted and loses his privacy.

B- Psychological reactions:

1-**Admission to hospital**:

-Invasion of privacy.

- Loss of independence .
- Reduced social contact.

2-**In reaction to such stresses patients show clear manifestations of distress which may include:**

-Fear and increased irritability.

-Unhappiness and loss of interest in the outside world.

-A sharp increase in the need for social reassurance.

3-A major part of the distress of patients related to the nature of their illness and prognosis.

Psychological responses to stressful medical procedures

– Medical procedures may be

1- Investigative (e.g., endoscopy, cardiac catheterization)
The stress is related to the associated physical distress and the threat of uncovering a serious medical condition.

2-Therapeutic (e.g. minor to major surgical procedures).

-The stress is related to the risks involved in such procedures in addition to the uncertainty as regards the outcome.

Psychological interventions for stressful medical procedures

1- Psychological support:

-Doctors, nurses, or psychologists should allow the patient to discuss his fears and provide support and reassurance.

2- Information provision:

-Sensory information, e.g.(pain)

-Procedural information, e.g.(what will happen during the procedure.)

3- Skills training:

- Teaching patients specific behaviours to cope with' specific medical procedures.

4- Modelling:

- Allowing patients to see, on film or videotape, other patients undergoing similar investigative procedure, treatment or surgery.

5- Cognitive-behavioral interventions:

-These **are** psychotherapeutic procedures .
-They aim at modifying the way patients cope with the procedure .
-They also reduce anxiety and stress.

GOOD LUCK

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